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Indian Standard

CODE OF PRACTICE FOR KEEPING DAIRY ACCOUNTS

PART I PRIMARY MILK COLLECTION UNITS

(Second Reprint FEBRUARY 1998)

UDC 637.13:657.4

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BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002

Indian Standard CODE OF PRACTICE FOR KEEPING DAIRY ACCOUNTS

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Indian Standard CODE OF PRACTICE FOR KEEPING DAIRY ACCOUNTS

PART I PRIMARY MILK COLLECTION UNITS

O. FOREWORD

- 0.1 This Indian Standard (Part I) was adopted by the Indian Standards Institution on 19 February 1975, after the draft finalized by the Dairy Products Sectional Committee had been approved by the Agricultural and Food Products Division Council.
- **0.2** It is an accepted principle that maintaining proper accounts in any business is to present a correct picture of the business to the management enabling it to have an overall control on the business operations. This principle applies equally to a dairy plant even more so as a highly perishable commodity (that is milk and milk products) is handled and accounted everyday and checks exercised promptly and effectively.
- 0.3 In order to get correct and uniform assessment of commercial aspect of the functioning of dairy plants, it is necessary to have a standard system of keeping accounts of various operations. It is also necessary to lay down certain norms for different factors coming into play in the operations

of different categories of dairy plants. These are:

- a) Compositional losses;
- b) Qualitative/quantitative losses;
- c) Losses due to breakage and wastage of packing materials;
- d) Consumable stores and their relationship to product throughputs; and
- e) Relationship of services requirements, such as, steam, refrigeration and water supply with finished products.
- **0.4** This code is being prepared in three parts. This part deals with primary milk collection units. The other two parts are:

Part II Market milk plants Part III Product plants

0.5 For the convenience of the users, the forms included in this standard are serially numbered and the letters 'PC' are prefixed to denote the forms pertaining to the primary milk collection units

1. SCOPE

- 1.1 This code (Part I) prescribes the practice of keeping dairy accounts at primary milk collection units.
- 1.1.1 This code also suggests a system of pricing to be followed for purchase of milk.

2. TERMINOLOGY

- 2.1 Forms for Primary Milk Collection Units These are the accounting forms used by individual milk producers/suppliers; collection centres; and feeder units. Other related forms shall also fall under this category.
- 2.2 Equated Fat The computed value of total milk solids content of milk expressed in terms of

fat which is the sum total of fat content plus SNF content converted into fat units by multiplying SNF content by a factor (say x), the value of x to be fixed by the purchase organization; taking into consideration regional and seasonal factors.

3. DETAILS

3.1 A set of accounting proforma which will serve as a guideline for the purpose of this standard is given in PC Forms No. 1 to 3.

4. PRICING SYSTEM

4.1 It is recommended that a two-axis pricing system should be followed for purchase of milk. A detailed note on the pricing system is given in Appendix A.

DAILY MILK RECEIPT REGISTER

Centre/Society	Date Morning/Evenin
Centre/50ciety	

St. No.	Name	REGIS-		PLE R	DATE				Burr	ALO .							Co	w				TOTAL VALUE	Re-
140.	SUP- PLIERS	No.		TLE		Quan- tity, litres/ kg	Fat, per- cent	SNF, per- cent	SNF, kg	Fat, kg	Equated Fat, kg	Rate per kg (Rs)	Value (Rs)	Quantity, litres/ kg	Fat, per- cent	SNF, per- cent	SNF,	Fat, kg	Equated Fat, kg	Rate per kg (Rs)	Value (Rs)	(Rs)	
1	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
			Buffalo	Cow																			

Note 1 - To be filled up at the time of milk collection.

Note 2 - Fresh form to be started for every two shifts.

Signature of Centre Incharge/Secretary

NOTE 3 - Separate form for morning and evening collection to be kept.

Note 4 - The fat percent shall be determined according to IS: 1224-1958 'Determination of fat in whole milk, evaporated (unsweetened)'. Milk, separated milk, skim milk, buttermilk and cream by the Gerbet method.

Note. 5 — The SNF percent shall be determined according to IS: 1183-1965 'Specification for density hydrometers for use in milk (revised)'.

PC Form No. 1(b)

TEST REPORT

Society/Centre	
	DateMorning/Evening

SL No.	Sample No.		Result of the Test					
	No. [As in Form No. 1(a)]	Fat, percent	CLR	SNF, percent				
1	2	3	4	5 .*	6			
			. '					
			<u> </u>					

Signature of Tester

Signature of Secretary/Centre Incharge

CLR = Corrected Lactometer Reading.

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PC Form No. 2

SUMMARY OF MILK RECEIPTS AND DESPATCHES

CATEGORY		М	ILK RECI	EIPTS		Mil	k Despat	CHES	DIFFER-	Number of Cans	REMARKS
Milk	Litres/ kg	Fat, percent	Fat, kg	SNF, percent	SNF, kg	Local Sales litres/ kg	To Dairy litres/ kg	Total	ENCE CANS		
1	2	3	4	5	6	7	8	9	10	11	12
Buffalo milk											
Cow milk											
Sour milk											

Signature of the Secretary/Centre Incharge

Signature of Person Carrying Milk

Signature of Receiver

Note 1 - To be filled in triplicate.

Note 2 — Original to be retained at primary collection unit.

Note 3 — Tear off duplicate and triplicate along perforation and send it alongwith the milk carrier to the processing or chilling station.

Note 4 — To be kept shiftwise.

PC Form No. 3(a)

PASS BOOK

Centre/Society	
Name and Address	Month
Registration No	(Fromto

DATE		Morni	NG					
	Quantity, kg/litres	Equated Fat, kg	Value (Rs)	Initials of Secretary/ Centre Incharge	Quantity kg/litres	Equated Fat, kg	Value (Rs)	Initials of Secretary/ Centre Incharge
1	2	3	4	5	6	7	8	9
1						-		
2			· · · · · · · · · · · · · · · · · · ·					
3								
4								
31								
Total								

Total Morning:

Quantity

Value

Total Evening:

Grand Total:

Note 1 — Separate colour pass books should be used for members and non-members.

Note 2 — To be priced.

Note 3 — Separate books for cow and buffalo milk.

Note 4 — Fresh pass book may be issued for every new year.

WEEKLY MILK PAYMENT REGISTER

Society/Centre	Week Beginning
	Date

NAME OF	Day	1	BUFFALO MILK		Cow Milk			
Supplier		Quantity, litres/ kg	Equated Fat, kg	Value (Rs)	Quantity, litres/ kg	Equated Fat, kg	Value (Rs)	
1	2	3	4	5	6	7	8	
	Sunday							
	Monday							
	Tuesday							
· · · · · · · · · · · · · · · · · · ·	Wednesday							
	Thursday							
	Friday							
	Saturday					-		
	Weekly Total				1	<u> </u>		

Signature of Incharge

APPENDIX A

(Clause 4.1)

TWO-AXIS PRICING OF MILK

A-1. GENERAL

A-1.1 Payment of milk on the basis of its compositional quality can best be made by rationally evaluating its fat and SNF contents. The purchase price can thus be calculated by fixing a predetermined rate for fat and SNF. This two-axis pricing policy would discourage adulteration and also provide a common pricing approach to cow and buffalo milk. It is, therefore, recommended that a price structure which in effect pays for fat and SNF, as if they were purchased separately, should be followed.

A-2. PRICING

A-2.1 It is important that milk price paid to farmers reflect the relative values realised by the dairy for fat and SNF. Experience in the past has been that the SNF is valued at 40 to 60 percent of the value attached to fat. It is necessary to work out this proportion for different regions so as to evaluate milk on its compositional quality. A ready reckoner (see Table 1) for payment of milk has been worked out by evaluating the SNF at 60 percent the value of fat. Taking the value of fat in milk at Rs 8·00/kg, SNF is then valued at Rs 4·80/kg, therefore 100 kg of milk containing

SNF, percent

6 percent fat and 9 percent SNF should be paid Rs 48.00 for its fat content and Rs 43.20 for its SNF content, that is, a price of Rs 91.20/100 kg milk or 91.20 paise/kg milk.

Note — This is only an example to illustrate the principle of two-axis pricing. In actual practice, custom made reckoners would need to be worked out for different seasons and according to local prices for fat and SNF.

A-2.1.1 For administration of this price structure, it should be noted that each seasonal price represents, in effect, a fixed offer per kg of fat and SNF procured. To administer this, it would probably prove most practical to test at the source for fat content and pay on the basis of 8.6 percent SNF content. On receipt at the dairy, each procurement centre's milk should be sampled and tested for fat and SNF. Any error in fat content, plus any bonus payable for SNF content over 86 percent can then be calculated: this would probably produce a small, net bonus, which can best be summed and paid monthly to reach procurement centre for distribution to producers in proportion to milk supplied. Milk supplied at less than 8.5 percent SNF should be 'fined' at the rate of up to 10 percent for every 1 percent drop in SNF below 8.5 percent.

TABLE 1 A READY RECKONER FOR TWO-AXIS PRICING OF MILK (IN PAISE PER kg) AT VALUE OF FAT RS 8-00/kg AND VALUE OF SNF RS 4-80/kg

8.6

8.7

8.8

8.9

9.0

8.5

SNF Value		40.8	41.3	41.8	42.2	42.7	43.2
FAT			FA	T VALU	E		
percent 4-0	32.0	72.8	73.3	73.8	74.2	74.7	75.2
4.2	33.6	74.4	74.9	75.4	75.8	76.3	76.8
4.4	35·2	76.0	76 ·5	77.0	77.4	77.9	78.4
4.6	36.8	77.6	78·1	78.6	79.0	79 ·5	80.0
4.8	38-4	79-2	79-7	80-2	80.6	81.1	81.6
5.0	40.0	80.8	81.3	81.8	82.2	$82 \cdot 7$	83.2
5.2	41.6	82.4	82.9	83.4	83.8	84.3	84.8
5.4	43.2	84.0	84 ·5	85.0	85.4	85.9	86.4
5.6	44.8	85.6	86-1	86.6	87.0	87.5	88.0
5.8	46.4	87.2	87.7	88.2	88.6	89-1	89.6
6.0	48.0	88.88	89.3	89-8	90.2	90.7	91.2
6-2	49.6	90-4	90-9	91.4	91.8	92.3	92.8
6·4 6·6 6·8	51·2 52·8 54·4	92·0 93·6 95·2	92·5 94·1 95·7	93·0 94·6 96·2	93·4 95·0 96·6	93·9 95·5 97·1	94·4 96·0 97·6
7.0	5 6 ·0	96-8	97-3	97.8	98.2	98.7	99.2

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